APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/203,672	12/01/1998	JIANGTAO WEN	Q48591	4494

7590   03/18/2003

SUGHRUE MION ZINN MACPEAK & SEAS
2100 PENNSYVANIA AVENUE NW
WASHINGTON, DC   200373202

EXAMINER
AN, SHAWN S

ART UNIT	PAPER NUMBER
2613	

DATE MAILED: 03/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

<table>
<tr><td rowspan="2">Office Action Summary</td><td>Application No.
09/203,672</td><td>Applicant(s)
Wen et al.</td></tr>
<tr><td>Examiner
Shawn An</td><td>Art Unit
2613</td></tr>
</table>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>*three*</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Jan 13, 2003* .

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *8-14* is/are pending in the application.

    4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *8-11 and 14* is/are rejected.

7) ☒ Claim(s) *12 and 13* is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some* c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    *See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

    a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). *26*

4) ☐ Interview Summary (PTO-413) Paper No(s). _____

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other:

DETAILED ACTION

Request for Continued Examination

1.   The request filed on 1/13/03 for a Request for Continued Examination (RCE) under 37 CFR 1.114 based on parent Application No. 09/203,672 is acceptable and a RCE has been established. An action on the RCE follows.

Response to Argument

2.   Appellant's arguments filed on 11/02/01 in the brief of Paper 19 have been fully considered but they are not persuasive. The Appellants present arguments contending the Examiner's rejection of claims 8-11 and 14 under 35 U.S.C. 102(e) as being anticipated by Suzuki et al as was previously set forth in the last Office action on 11/30/2000 as Paper 11. Further, the Appellants present arguments of which Suzuki et al does not disclose or teach generating an extended code field (COD), which includes: A) indicating whether both a motion vector (MV) and a discrete cosine transform (DCT) are <u>not</u> encoded and B) indicating whether both the MV and the DCT are encoded, or whether only the MV is encoded (page 7, lines 15-18) as recited in claim 8;   C) the COD field having a bit value of "11" as recited in dependent claim 11;   and D) Information is encoded by using only MV, when motion of an image is constant as recited in claim 14. However, after careful consideration of the arguments presented, the Examiner must respectively disagree for the reasons that follow.

Regarding argument A), Suzuki et al clearly teaches that if the COD field is 1, there is <u>no</u> data to be transmitted for the macroblock, so that data subsequent to the I-flag is not transmitted (col. 33, lines 61-63). In other words, both a motion vector (MV) and a discrete cosine transform (DCT) are <u>not</u> encoded.

Regarding argument B), quite opposite to COD 1, Suzuki et al clearly teaches that if ac components other than 0 are present in the DCT coefficients of the I or P picture,

the COD flag becomes 0, and the subsequent data may be transmitted (col. 33, lines 63-66). In other words, both a motion vector (MV) and a discrete cosine transform (DCT) are encoded.

Regarding argument C), it is indeed true that Suzuki's COD field contains only 1 bit. However, the Suzuki incorporates both the COD (Fig. 40A) and the MODB field codes (Fig. 40B) as extended code fields to meet the Appellant's extended field codes (COD) having at least two bits. Suzuki also discloses the extended code field 00 indicating neither the MV nor the DCT values are encoded, a bit value 11 indicating both the MV and the DCT value are encoded, and a bit value 10 indicating only the MV is encoded (col. 35, lines 3-8). Therefore, it's quite clear that not only Suzuki teaches Appellant's extended field code (COD), but also discloses the same concept of the extended field code having two bits in the form of MODB field. In other words, Suzuki's reference teaches Appellant's extended field codes and its concepts (methods). Appellant incorporates the extended field code (COD) having two bits, while Suzuki's reference have the substantially the same extended field code (COD) having one bit in combination with MODB field codes as having two bits, *but the results are identical*.

Regarding claim D), Suzuki discloses that in a case for P-VOP, if set COD flag to 1, it may treat the macroblock as a 'P(inter)' macroblock with the MV for the whole macroblock equal to zero and with no coefficient data (col. 34, lines 10-14). In other words, there is a zero MV, meaning it hasn't moved (motion of an image is constant), but it still is a MV, nonetheless. Therefore, the information is encoded by using only MV (in Suzuki's case 0 MV), when motion of an image is constant, since there are no coefficient data (DCT).

Henceforth, the Examiner contends that Suzuki et al discloses all of the limitations in claims 8-11 and 14, incorporating the extended code fields (COD and MODB). Moreover, the Examiner believes generating an extended code field has far more patentable weight than simply calling it a (COD). The Examiner further believes that an abbreviated term such as COD, MODB, or any other suitable terms in parenthesis, could easily be changed into some other term as a standard term or as a non-standard term as appropriate. Therefore, as long

as the extended code field representing its coding state of the information, and it's limitations are met, the abbreviated terms associated with the extended code field should be considered Appellant's equivalent terms or functions.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4.   Claims 8-11 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Suzuki et al (6,097,842).

Regarding claim 8, Suzuki et al disclose a method for use in a system comprising the steps of: generating an extended code (COD) field representing a coding state of the information (Fig. 40A, COD); and including in the extended code field, a bit stream indicating whether both a motion vector and the DCT value being not encoded (Col. 33, lines 54-60), whether both the motion vector and the DCT value are encoded (Col. 35, lines 1-8), or weather only the motion vector is encoded (Col. 34, lines 31-40 and Col. 35, lines 1-3).

Regarding claim 9, Suzuki discloses COD field comprising at least two bits (Col. 35, lines 1-8).

Regarding claim 10, the Examiner notes that H.263 or MPEG-4 encoding standards are well known in the art. Furthermore, Suzuki discloses H.263 encoding standards (Col. 34, line 35).

Regarding claim 11, Suzuki discloses the code field having a bit value "00" indicating neither the MV nor the DCT value are encoded, a bit value "11" indicating both the MV and the DCT value are encoded (Col. 35, lines 3-8), and a bit value "10" indicating only the MV is encoded. Therefore, it is considered quite obvious to simply inter-change a bit value to an another assigned bit value.

Regarding claim 14, it is considered quite obvious and well known to encode only MV when motion of an image is constant in order to reduce bits required for coding video frames.

Allowable Subject Matter

5.   Claims 12-13 are objected to as being dependent upon a rejected base claim 8, but would be allowable: if claim 12 is rewritten in independent form including all of the limitations of the base claim 8 and any intervening claims. Accordingly, if the amendments are made to the claims listed above, and if rejected claims are canceled, the application would be placed in condition for allowance.

Conclusion

6.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawn An whose telephone number is (703) 305-0099.

SHAWN S. AN
PATENT EXAMINER

SSA

March 12, 2003